Evaluating the Effectiveness of a Juvenile Firesetter Program

Executive Development

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Abstract

Research was prompted to find data that measured the effectiveness of juvenile firesetter programs that was comparable to national statistics. The purpose was to implement a means for using data with an evaluation system to determine measurable results and long-term effectiveness regarding recidivism. This would provide justification for on-going continuance of the program and funding.

Action research was used to answer three questions:

- 1. After a juvenile completes an intervention program, what follow-up is conducted to audit for any reoccurrence of fireplay or firesetting?
- 2. How long after completion of an intervention program is follow-up conducted and how many follow-ups are done and for how of a period (i.e., months, years) does it continue?
- 3. What information is compiled to monitor and evaluate the program? Are there any national models for monitoring a program?

The procedure to determine the results involved searching for information that referenced setting up a Juvenile Firesetter Program (JFP) or summarized existing programs. Due to limited literature available, a survey was sent to organizations and fire departments that had a JFP. In order to locate programs, the Internet was used as well as JFP's referenced in literature.

The results of the literature search established that there was a national model for frequency and length of time to follow-up with juveniles to audit for recidivism.

Additionally, a national model was found on data collection that could be used for evaluation purposes related to recidivism. The national models were compared to survey results.

Recommendations included revising existing data collection and increasing follow-ups to pattern the national model. To compare results of the JFP to local, county, and state statistics, the recommendation was to support the State Fire Marshal to implement a statewide coalition. Comparing the JFP results nationally could be accomplished by networking methods.

Table of Contents

Abstract	i
Table of Contents	iii
Introduction	1
Background and Significance	2
Literature Review	5
Procedures	12
Results	13
Discussion	26
Recommendations	28
Reference List	30
Appendix A	32
Appendix B	34
Appendix C	70
Appendix D	73
Appendix E	87

"A juvenile firesetter program should be working toward a specific outcome, through a well understood process. Without this, we will wander aimlessly about never knowing if we have arrived at our destination" (Porth, October, 1992, p. 12).

In 1997, the Fire Chief of the Maple Grove Fire Department asked if a report on the recidivism rate of the juveniles that had successfully completed our intervention program could be provided. If so, for what period of time was the recidivism rates based on? He also asked if the data the program tracked could be compared to national statistics.

A management information system (MIS) was in place that tracked case characteristics of the firesetter and the firesetting incident, the services that were provided, and date of occurrences. Other than the MIS at that time, the only follow-up that was conducted was a questionnaire that was mailed to the juvenile's parent's six months after completion of the program. Other than repeat fire incidents that the fire department responded to, there was no other real documentation to back up the success of the program.

The significant purpose of this research is to provide support and national based modeling for the Maple Grove Fire Intervention Commission. There is a need to implement a means for summarizing and analyzing data that is comparable to national statistics. This information, coupled with an evaluation system to determine measurable results and the long-term effectiveness of the program in regards to recidivism, would provide justification for on-going continuance of the program and funding.

This should be a concern for those in government service to continue to grow and survive in today's competitive economy. "In today's demanding fiscal climate, all programs are under intensive scrutiny to prove their worth. Gone are the days when we can say to the administration, 'just trust me'" (Porth, 1992, p. 13). This research may also be significant to other local and county fire departments

that want to improve the evaluation and professional image of their fire intervention programs.

Action research was conducted to answer three questions:

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- 2. How long after completion of an intervention program is follow-up conducted and how many follow-ups are done and for how long of a period (i.e., months, years) does it continue?
- 3. What information is compiled to monitor and evaluate the program? Are there any national models for monitoring a program?

Background and Significance

"Early in the 1980's, FBI statistics on the percentages of incendiary fires started by children brought the problem of juvenile firesetting to the forefront" (Record, 1989, p. 10). On October 4, 1997 the FBI National Press Office in Washington, DC released the Uniform Crime Report, 1996 Crime Statistics.

A total of 88,887 arson offenses was reported in 1996....Of the arson cleared by law enforcement during 1996, 45 percent involved only people under the age of 18, a higher percentage of juvenile involvement than for any other Index crime. (FBI, 1997, p. 4)

Programs that deal with juvenile firesetters have been around for many years. These programs varied in the information that was kept, and how this information was used.

Recognizing the need for increased knowledge about how to reduce the problem of juvenile firesetting, the Office of Juvenile Justice and Delinquency Prevention (OJJDP) and the U.S. Fire Administration (USFA) funded an initiative from 1987 through 1993 known as the National Juvenile Firesetter/Arson Control and Prevention (NJF/ACP) Program. Through a

nationwide assessment of juvenile firesetter programs, the NJF/ACP defined seven components common to effective juvenile firesetter programs. Of these, "a monitoring component to track the program's identification and treatment of juvenile firesetters was identified". (Garry, 1997, p. 3)

While many juvenile firesetter programs have developed some internal system to monitor their caseloads, others simply maintain individual case files with no systematic way to track cases, determine final dispositions, report to funding agencies, etc. Very few have systems capable of being used for evaluation purposes. (FEMA/USFA, FA-147, 1994, p. 108)

Programs for juvenile firesetters usually begin in a community out of need and grow with that need. The first priority is to help the child and then as the program grows, usually out of necessity, the effectiveness of the program becomes a reality. In the NJF/ACP Assessment Report, Executive Summary (Sept 1989), program effectiveness was assessed of juvenile firesetter programs across the nation. The executive summary reports that,

Most of the programs are essentially "home grown", developed in trial-and-error fashion by one or two people committed to solving the problem of juvenile firesetting in their communities. In some instances, the results have been very impressive, in other cases, less so. (Cook, Hersch, Gaynor, Roehl, 1989, p. 13)

Many programs boast how their programs have low recidivism rates, but they do not follow-up on juveniles. In fact, many rely solely on whether a juvenile starts a fire that will require the services of the fire department or if they are caught; therefore are then referred back to the program. "Most programs report recidivism rates, and they are invariably quite low, rarely exceeding 7%. The rates are subject to question, because so few programs maintain accurate follow-up statistics" (Cook, et al., 1989, p. 13).

The NJF/ACP, Fire Service Guide to a Juvenile Firesetter Early Intervention Program (1994), states, "Simple monitoring systems are recommended for all juvenile firesetting programs regardless of size..." (p. 40). This guide explains that,

Monitoring systems serve different purposes, depending on the information they contain and the uses to which they are put. At the most elemental level, a management information system (MIS) is needed for case tracking, caseload analysis, and reporting of program results....

Extending the MIS to include recidivism and other follow-up data provides the basic building blocks for an evaluation system. (FEMA/USFA, FA-146, 1994, p. 40)

Programs across the U.S. continue to strive for effectiveness and justification for juvenile firesetter programs. Don Porth, Juvenile Firesetter Program Manager of the Portland (OR) Fire Bureau, quoted Mark Twain in a 1992 article, Mapping Out A Successful Juvenile Firesetter Program. "Supposing is good, finding out is better" (Porth, 1992, p. 14). Porth goes on to say,

Having a program and reaping the rewards that a program has to offer can provide us with the following:

- 1. Justification for program existence
- 2. Justification for program expansion
- 3. The ability to evaluate and judge program effectiveness
- 4. Collection of useful information that can help us all better understand the juvenile firesetter problem. (Porth, 1992, p. 14)

This research is relevant to the Executive Development Course because it relates directly to several units studied during the course including Organizational Change and Development and Service Quality. The results of this research will actively apply the course concepts in the real world.

The literature review encompassed reviewing manuals, handbooks, journal articles, as well as a survey of fire intervention programs from the United States and Canada. The literature review began by examining The Preadolescent Firesetter Handbook, Ages: 7–13, FEMA/USFA, FA 82/December 1988. It is one of a three-volume sequence on juvenile firesetting intervention developed for assisting the fire service and other agencies. Although these handbooks were first available in 1988, they are still in use today and are currently available upon request from the FEMA-USFA, FEMA Publications Catalog, FEMA-20/July 1997. Appendix 2 of this handbook has one page of information on program monitoring and evaluation. The leading paragraph states, "There are methods of determining the effectiveness of your program. Monitoring (or documentation) lets you know whether you followed or are following your program plan. Evaluation measures whether what you did had an effect on the problem" (FA 82, 1988, p. 117).

Examples are given of less formal methods that fire departments can use to determine effectiveness of a program. One of the examples is to document the number of juvenile recidivists (repeaters) but does not indicate clearly how to go about this. The other two volumes do not have any information relating to follow-up or monitoring the status of a juvenile in relation to recidivism or elements of what a monitoring system should include.

In an attempt to find data that had information specifically targeting recidivism and nationally modeled information systems, the next step of the literature review was to review the NJF/ACP, Assessment Report, Executive Summary. "The report summarizes the results of Stage I of a four stage program, the assessment of the incidence and dynamics of juvenile firesetting and juvenile firesetter programs" (Cook, et al., 1989, Preface).

In order to develop a prototype, a national search was conducted to locate existing programs.

Then 70 programs were sent a two-stage mail survey. To fully examine the programs, two-day site visits conducted by the Institute for Social Analysis (ISA) were made to 13 of the programs (Cook, et al., 1989).

Monitoring systems is one of seven elements identified to form a prototype program manual to be developed in Stage II. The building blocks to develop the monitoring systems element include: "Building and maintaining systems for tracking the disposition of cases, recidivism rates, and rates of juvenile firesetting" (Cook, et al., 1989, p. 11).

In October of 1993, an inaugural meeting took place consisting of a 25-member National Fire Protection Association Task Force. The mission of this task force was to define the needs in the area of juvenile firesetting. The group defined specific, prioritized strategies for reducing the problem of juvenile firesetting. The group came up with areas that posed the greatest barriers that communities faced on a local level. One of these mega-themes (as it was titled by the task force), was the need to use data more effectively. (Report of the NFPA Task Force on Juvenile Firesetting, Inaugural Meeting, 1993, pp. 2-4)

Specific recommended actions included:

- Develop common sense guidelines for the fire service and the mental health and
 education communities on where to find and how to use available data appropriately.
 Identify the limitations of various sources of data so that users can make good choices.
- Present data in summary form, using easy-to-understand graphics (perhaps in 'one-pager' format).
- Use data to raise public and professional awareness of the juvenile firesetter issue.
 (Report of the NFPA Task Force on Juvenile Firesetting, Inaugural Meeting, 1993, p.
 13)

In September of 1993, a continuum of the inaugural meeting was held. This group had

some of the original participants but included new participants with a focus on experience and skill. These participants came from across the U.S. and Canada and included a range of disciplines that worked with juvenile firesetters. Twenty-two specific action items are identified. Improved data collection was one of these. The participants agreed with the necessity to "develop a minimum set of data elements needed for consistent national data collection" (Report of the NFPA Juvenile Firesetter Practitioners' Forum, 1995, pp. 9-10). A recommendation was made to NFPA, "To provide assistance in designing a uniform data collection tool to be used by local fire departments and juvenile firesetter screening/intervention programs" (Report of the NFPA Juvenile Firesetter Practitioners' Forum, 1995, p. 14).

As a result of the NJF/ACP Assessment, ISA developed three program manuals that have components that describe how to develop, implement and operate a juvenile firesetter program (Fire Service Guide to a Early Intervention Program, FEMA/USFA, FA-146, 1994). These manuals are: Guidelines for Implementation, FEMA/USFA, FA-147/June 1994, The User's Guide, FEMA/USFA, FA-145/ June 1994, and the Trainer's Guide, FEMA/USFA, FA-149/ June 1994. In addition, Fire Service Guide to a Juvenile Firesetter Early Intervention Program, FEMA/USFA, FA-146 /June 1994, was also developed which integrates part of the information in the Implementation Guide and explains how to implement one type of the advocated programs. These manuals are currently available upon request from the FEMA-USFA, FEMA Publications Catalog, FEMA-20/July 1997.

The literature review of these manuals focus specifically on follow-up to audit for any reoccurrence of fireplay or firesetting and what information is necessary to monitor and evaluate a program.

The Trainer's Guide provides curriculum content summary of the three major types of monitoring systems: "The first is a Management Information System (MIS). An MIS provides timely

information on the number and types of cases handled by the program" (FEMA/USFA, FA-149, 1994, p. 19).

The second type of monitoring system is an evaluation system. A program evaluation system is an extension of a MIS in that it uses the data generated by the MIS to analyze program operations and outcome. In addition to caseload information, an effective evaluation system will include data on firesetting recidivism and follow-up information on caseload disposition.

(FEMA/USFA, FA-149, p. 19)

An incident reporting system is the third type of monitoring system. Its purpose is to record basic information on all known juvenile firesetting incidents, regardless if the firesetter is known or handled by the juvenile firesetter program (JFP). The basic data needed to monitor jurisdiction-wide rates of juvenile arson, firesetting, and gauge the effectiveness of education and outreach efforts of the program are provided by the data of an incident reporting system (FEMA/USFA, FA-149, 1994, FEMA/USFA, FA-147, 1994).

The User's Guide "is a cookbook format that guides the reader from the planning to the execution of an effective community program" (FEMA/USFA, FA-145, 1994, p. 3). This volume is designed to be a companion document to be used with the other volumes. It highlights key information and then outlines decision elements. The guide is set up in the same format as the other manuals so information can be easily and quickly found in the other volumes (FEMA/USFA, FA-145, 1994).

Having current and accurate data on program operation provides management with information on the relative impact and effectiveness of the program. This information can be invaluable when it comes time for sustaining or increasing the funding, staffing, and general life of the program. (FEMA/USFA, FA-145, 1994, p. 35)

Guidelines for Implementation, (FEMA/USFA, FA-147/June 1994) is based on the seven

different components which highlight the aspects of a program. The information presented is detailed and comprehensive. The sixth component is comprised of monitoring systems. "A Management Information System (MIS) should include case characteristics of the firesetter and the firesetting incident, services rendered, dates of key events, and the final disposition of the case" (FEMA/USFA, FA-147, 1994, p. 108).

An MIS provides the means for summarizing the program's caseload (the number of cases handled, case type, firesetter characteristics, number and type of services rendered, etc.), and providing data for annual reports, evaluations, and funding agencies. (FEMA/USFA, FA-147, 1994, p. 108)

An evaluation system would contain all of the information above plus follow-up data on firesetting recidivism and other problems such as delinquency, school or family problems, etc. The evaluation is an extension of the MIS, rather than a separate system. Much of the data in such an evaluation system may come form the program's routine follow-up contacts with families of firesetters and the referral agencies to which they are referred. (FEMA/USFA, FA-147, 1994, p. 108)

The management information and evaluation system may be kept manually, but since personal computers have become increasingly prevalent in the workplace, computerization is advised....When a program reaches somewhere between 75 and 100 cases per year, computerization is probably warranted. (FEMA/USFA, FA-147 1994, p. 112)

The Implementation Guide, (FEMA/USFA, FA-147, 1994) includes specific case information and other data to be kept in each of the proposed three monitoring systems. This information can be found in the results of this research.

To extend the MIS to become an evaluation system, follow-up activities must take place with a

number of key agencies to determine the long-term effectiveness of the intervention strategies in terms of recidivism. For evaluation purposes, a program needs to know about juvenile delinquency, continued problems at school or home, etc. Quarterly contacts should be made with the family and key agencies for a year or two after the precipitating incident to inquire about recidivism and related problems. (FEMA/USFA, FA-147, 1994, p.114)

Parents are probably the best single source of follow-up information, if sufficient rapport has been built to enable the parents to report any additional delinquent behaviors or other problems. Telephone contact should be made with the parents rather than sending an impersonal form. (FEMA/USFA, FA-147, 1994, p.114)

A review of the Fireproof Children Handbook (Bills, Cole, Crandall, Schwartzman, 1990) shows some reference to collecting data. This data collection is targeted more to starting a new program to justify the need. Sample forms are included in the handbook and some of these could be used for ongoing data collection. There is no specific information or instruction in the handbook regarding follow-up after intervention activities to audit for recidivism.

A review of Playing with Fire: A Deadly Game, A Companion Manual (Pinsonneault, 1991) shows that this manual is primary for setting an interagency juvenile firesetter intervention program. There is no specific information or instruction in the manual on data collection or follow-up after intervention activities to audit for recidivism. The sample forms that are included are not related to a MIS or evaluation.

To find out current information that fire intervention programs across the U.S. are compiling to monitor and evaluate their programs, as well as the how the program is tracking recidivism rates, a survey was conducted. The findings of the survey showed how JFP's are evaluating recidivism and what statistics they are reporting. This is covered in detail in the Results section

of this research.

Procedures

Initial research began at the Learning Resource Center (LRC), Emmitsburg, MD, to look for articles in journals, reports, and periodicals that related to juvenile firesetting. Using the words juvenile firesetter as a starting point, sources were searched looking for information. The information that was found was narrowed down to those articles or reports that had reference to setting up an intervention program, what other fire departments with juvenile firesetter programs (JFP) reported, and those that reported or summarized existing programs.

Accessing the World Wide Web and using the LRC's online card catalog continued the literature search. A local library was used to borrow materials through interlibrary loan. The limitations found in searching for information through the LRC was that the information obtained was not recent. There were limited recent articles in journals and periodicals. The local library had very little information.

The World Wide Web was used to search for fire departments and organizations throughout the U.S. to send out a survey. When a fire department or organization was located, information was collected such as the address, phone number and fax number, if available. Not all web sites provided this information, so e-mail was used to send surveys. Reference lists included in handbooks and manuals were also a source of fire departments and organizations with programs. Because many of these were not recently published, most of the contact persons were no longer in that particular department or at times employed with the organization.

The surveys were sent out to the random fire departments and organizations, as they were located. The only criterion that was used was that the fire department or organization had a JFP. The

surveys were sent out over a span of several months. Follow-up phone calls were made to those departments and organizations that did not return the surveys. The surveys were sent out by several different methods including mail, facsimile, or electronic mail. Forty-one surveys were sent. Twenty-six or approximately 63.4% of these were completed and returned. A sample of the survey letter can be found in Appendix A, followed by the answers from the individual JFP surveys. These can be found in Appendix B

Definitions

Fireplay: "Child 'fireplay' incidents typically involve children who are too young to understand the danger of their actions" (Reardon, 19909. p.68).

Firesetting: "Juvenile firesetting...is a deliberate act typically committed by children old enough to understand the dangers of their behavior" (Reardon, 1990, p. 70).

Results

The results of the research project come from the comprehensive examination of all of the data from manuals, handbooks, and journal articles and the completed survey. From the 26 or 63% of the surveys that were returned, in few instances was the information returned from different JFP's worded in the same way. Because of this, the process required dissecting the information in the returned surveys to correlate the results. This information is then compared to the results of the research from the manuals, handbooks, and journal articles. The results of this project have been grouped and summarized in text and table form.

After a juvenile completes an intervention program, what follow-up is conducted to audit for any reoccurrence of fireplay or firesetting?

Nineteen or 73% of the JFP's surveyed answered yes to question one. One of these JFP's answered no to question one, but reported some follow-up based on time allowing in question two. Seven or 27% answered no. To clarify this, one of the programs said that although they did not conduct follow-up, they do monitor fire calls and reports for cases that involve youth.

Research Question Two

How long after completion of an intervention program is follow-up conducted and how many follow-ups are done and for how long of a period (i.e., months, years) does it continue?

Of the 26 surveys that were returned, 18 JFP's report that that they conduct follow-up with juveniles after they complete the program. One other JFP report that follow-up is based on time allowing. Of the JFP's that conducted follow-up, only a set of two programs follow the same time frequency and regularity. Of these four programs, two conduct follow-up at one month after the juvenile completes the program and then again at six and 12 months. The method of follow-up was not reported. The other three conduct only one follow-up at six months. One program uses an evaluation card and the other conducts a progress report on the client's written goals.

Two other programs reported three follow-up frequencies. The first program reported follow-

ups at three months, six to nine months and at 12 months, using the phone contact as the follow up method. If a phone is not available, then mail is used. The other program reports follow-up at three months, six months and 12 months. The method of follow-up is not reported.

Four JFP's report follow-up's that are structured according to the risk factors of the individual juvenile. The first program conducts one follow-up at one month after completion of the program. If the juvenile is referred for counseling or therapy, then follow-up is done at three-month intervals for at least two years on average. A phone call or visit is the method used to follow-up. The second program conducts two follow-ups at three months and again at six months after completion of the program for higher risk juveniles, but conducts one follow-up at six months for lower risk juveniles. Method of follow up is not reported. The third program has somewhat less formalized follow-up procedures. An initial follow-up is conducted at one week after completion of the program. Depending on each individual juvenile and their circumstances including such things as age and risk level, the follow-ups are continued on a weekly basis for four to six months. The method of follow-up is not reported. The last program conducts follow-up at two and six weeks, but depending on the incident, may continue to follow-up more or less.

Four JFP's conduct two scheduled follow-ups. The first program at six and 12 months with a mailed questionnaire. The second program at one and five months, with a phone call at one month and a program evaluation mailed at five months, and the third program at one and 12 months with a phone call or by mail. The fourth program conducts follow-ups at two and six weeks. The method of follow-up is not reported.

Four programs report one follow-up. The first at three months with a letter mailed, another program at four months with a phone call or by mail, the third program conducts follow-up three months after appearance in court. The follow-up is conducted by Children's Hospital. If

any are missed, follow-up is then conducted one to two months later. The last JFP reports one follow-up conducted at six months, but this was based on time allowing. Including the JFP that does follow-up as time permits, 37% of the programs does one follow-up after completion of the program. Twenty-one percent of the programs conduct follow-ups that are structured according to the risk factors of the individual juvenile. Twenty-one percent of the programs conduct two follow-ups and 21% conduct three follow-ups. A table outlining these results can be found in Appendix C.

The results of the literature review show that there is a national model for frequency of follow-up with juveniles to audit for recidivism. The national model (Guideline for Implementation, FEMA/USFA, FA-147, 1994) indicates that,

Quarterly contacts should be made with the family and key agencies for a year or two after the precipitating incident to inquire about recidivism and related problems....Telephone contact should be made with the parents rather than sending an impersonal form. (FEMA/USFA, FA-147, 1994, p. 114)

The survey results were compared to the national model. Of the JFP's surveyed, one program conducts quarterly follow-ups for one to two years. The JFP continues follow-up at three-month intervals for at least two years on the average when the individual is referred for counseling or therapy. Six or approximately 2.3% of the JFP's continue follow-ups for one year.

Research Question Three

What information is compiled to monitor and evaluate the program? Are there any national models for monitoring a program?

The answers to Question 3 found in the 26 surveys, is consolidated into an alphabetical list to determine the frequency of identical statistics. Two hundred and forty different statistical items are recorded. These items are located in Table D1, All Statistical Information From All Surveys in Appendix D. Only 11 statistical items or approximately 4.5% of the total items are found in the 26 surveys that are stated identically. To clarify the results, the three JFP's that use the Massachusetts State-Wide Juvenile Firesetter Program Coalition form are not included unless another program also uses the same statistic. These statistics and the number of times they were found are as follows:

Table 1
Frequency of Identical Statistics

Statistical Information		\mathbf{F}^{a}
Address		2
Age		5*
Grade		4*
Marital Status		2
Number of injuries		2
Race		3
Referral source	3	
School name		2
Sex		5*
Total dollar loss		2
Zip Code		2

Note. F^a represents the number of times a statistic is found in more than one survey with identical wording. The three JFP's that used the Massachusetts State-Wide Juvenile Firesetter Program Coalition form are not included unless another program also used the same statistic found in the surveys.

*= Three of these are used in the JFP's who use the Massachusetts State-Wide Juvenile Firesetter Program Coalition form.

Although there are only 11 identical statistics found in the 240 statistical items, many of the items have the same intent or are related. The statistical items are then arranged into nine different categories. This allows the information to be grouped that has the same intent or that is related. The first category, Table E1, Information Relating to the Juvenile, found in the appendix, has 35 different statistical items. Five or approximately 14.3% of the statistical items have the same intent or are related with a frequency in at least four other cases. These statistical items and the frequency to others are shown as follows:

Table 2
Frequency of Related Information for Juvenile

Statistics Relating to Juvenile	F^{a}	F^{c}
Age	5	10
Sex	5	6
Grade	4	5
ADHD? (Yes or No)	3	4
History of fireplay (Yes or No)	1	14

Note. F^a represents the number of times a statistic is found in more than one survey with identical wording. The three JFP's that used the Massachusetts State-Wide Juvenile Firesetter Program Coalition form are not included unless another program also used the same statistic found in the surveys. F^c represents the statistical items that have the same intent or that are related to other statistics with a frequency in at least 4 other instances.

The second category, found in Table E2, Information Relating to Parent or Guardian and Residence or Environment, included in the appendix, has 30 different statistical items. Two or approximately 6.7% of the statistical items have the same intent or are related with a frequency in at least four other cases. These statistical items and the frequency to others are shown as follows:

Table 3

Frequency of Related Information to Parent or Guardian and Residence or Environment

Statistics Relating to Parent or Guardian and Residence or Environment	F^{a}	F^{c}
Marital status	2	8
Number of smokers in home	1	4

Note. F^a represents the number of times a statistic is found in more than one survey with identical wording. The three JFP's that used the Massachusetts State-Wide Juvenile Firesetter Program Coalition form are not included unless another program also used the same statistic found in the surveys. F^c represents the statistical items that have the same intent or that are related to other statistics with a

In the third category, Table E3, Information Relating to Fire Incident, located in the appendix, has 33 different statistical items. Three or approximately 9.4% of the statistical items have the same intent or are related with a frequency in at least four other cases. These statistical items and the frequency to others are shown as follows:

Table 4

Frequency of Statistics Relating to Fire Incident

Statistics Relating to Fire Incident		F ^a	F ^c
Ignition source	1	7	
Incident date and time		1	7
Most common place for firesetting		1	7

Note. F^a represents the number of times a statistic is found in more than 1 survey with identical wording. The 3 JFP's that used the Massachusetts State-Wide Juvenile Firesetter Program Coalition form are not included unless another program also used the same statistic found in the surveys. F^c represents the statistical items that have the same intent or that are related to other statistics with a frequency in at least 4 other instances.

The fourth category, Table E4, Information Relating to Program, Services, and Education, located in the appendix, has 60 different statistical items. Six or 10% of the statistical items have the

same intent or are related with a frequency in at least four other cases. These statistical items and the frequency to others are shown as follows:

Table 5

Frequency of Statistics Relating to Program, Services, and Education

Assessment determination 1 Most common age 1 Sex, Number of males, females 1 Number of students in program 1 9	
Sex, Number of males, females 1 9)
)
Number of students in program 1 9	
1 0	
Number of hours involved in each case 1 4	
Program evaluation 1	4

Note. F^a represents the number of times a statistic is found in more than 1 survey with identical wording. The 3 JFP's that used the Massachusetts State-Wide Juvenile Firesetter Program Coalition form are not included unless another program also used the same statistic found in the surveys. F^c represents the statistical items that have the same intent or that are related to other statistics with a frequency in at least 4 other instances.

In the fifth category, Table E5, Information Relating to Referral or Other Agencies, located in the appendix, has 29 different statistical items. All of these statistical items have the same intent or are related in some way. These items related to the agencies that referred or were referred to.

In the sixth category, Table E6, Information Relating to Fire Department Information, located in the appendix, has five different statistical items. All of these statistical items have different intent or relation. These items each specifically relate to information that is specific to fire departments such as name and address, reporting, etc.

In the seventh category, Table B7, Information Relating to Injuries, Deaths, and Damages, located in the appendix, has 30 different statistical items. Three or 10% of the statistical items have the same intent or are related with a frequency in at least four other cases. These statistical items and the frequency to others are shown as follows:

Table 6

Frequency of Statistics Relating to Injuries, Deaths, and Damages

Statistics Relating to Injuries, Deaths, and Damages	F ^a	F^{c}
Number of injuries	4	12
Number of deaths	1	7
Total dollar loss	2	13

Note. F^a represents the number of times a statistic is found in more than 1 survey with identical wording. The 3 JFP's that used the Massachusetts State-Wide Juvenile Firesetter Program Coalition form are not included unless another program also used the same statistic found in the surveys. F^c represents the statistical items that have the same intent or that are related to other statistics with a frequency in at least 4 other instances.

Category 8, Table E8, Miscellaneous Information, located in the appendix, has 18 different statistical items. One or approximately 5.6% of the statistical items have the same intent or are related with a frequency in at least four other cases. This statistical item and its frequency to others is shown as follows:

Table 7

Frequency of Miscellaneous Information

Miscellaneous Statistics	F^{a}	F^{c}	
Number of fires involving children playing with fire		1	6

Note. F^a represents the number of times a statistic is found in more than one survey with identical wording. The 3 JFP's that used the Massachusetts State-Wide Juvenile Firesetter Program Coalition form are not included unless another program also used the same statistic found in the surveys. F^c represents the statistical items that have the same intent or that are related to other statistics with a frequency in at least 4 other instances.

The last category, Table E9, Information Relating to Recidivism, located in the appendix, has four different statistical items. All of the statistical items have the same intent or are related with a frequency in at least four other cases. The items are all related to recidivism in some way.

The results of the literature review show one national model for evaluation purposes to determine effectiveness as it relates to recidivism rates. The national model is located in the Guidelines for Implementation and Fire Service Guide to a Juvenile Firesetter Early Intervention Program. These

manuals and two others were supported by a grant awarded to the ISA by OJJDP and USFA. (FA-147, 1994). This initiative took place from 1987 through 1993 and is known as the NFP/ACP (Garry, 1997, pp. 3-4). The national model, Central Elements of the Monitoring Systems, MIS includes the following:

Management Information System (MIS). There are four categories of data included in an MIS:

I. Case characteristics

- a. Source of referral
- b. Age, sex, race, family status of firesetter
- Details of the firesetting incident—motive, presence of others, location of fire,
 materials used, damage estimate, injuries, deaths
- d. Past firesetting incidents
- e. Initial assessment after screening (e.g., little, definite, or extreme risk)

II. Services rendered

Dates, content, and length of educational sessions; dates, purposes, and agencies of referral(s); number and type of counseling sessions; details of other services (mentor pairing, restitution, community service, visits to burn units, etc.)

III. Case disposition

- Dates and outcomes of all services rendered, gathered through routine reporting
 by all cooperating agencies or direct follow-up
- b. Status of case in criminal justice system

IV. Program Activities

Education/prevention activities, school-based or community or other – type,
 number, attendance, content

- b. Training for others in the field type, curriculum, number trained
- c. Resource/materials development
- d. Other media coverage, Task Force participation, etc.

(FEMA/USFA, FA-145, 1994, pp. 109-110; FEMA/USFA, FA-146, 1994, pp. 41-42)

The survey results are compared to the national MIS model. Seven out of 11 or approximately 64% of the statistical items located in the results of the Frequency of Identical Statistics are also located in the national MIS model.

The case characteristics of the national MIS model are compared to the following tables noted elsewhere in this research report: Frequency of Related Information for Juvenile, Frequency of Related Information to Parent or Guardian and Residence or Environment, Frequency of Statistics Relating to Fire Incident, Frequency of Statistics Relating to Program, Services, and Education, Information Relating to Referral or Other Agencies, and Information Relating to Injuries, Deaths and Damages.

These tables consist of 20 statistical items. Of the 20 items, 14 or 70% of the items are located in the national MIS model.

Discussion

The research results showed that there is little information on specific instruction or national modeling for conducting follow-up to audit for any reoccurrence of fireplay or firesetting or what information should be used to monitor and evaluate a program. Several sources indicate the need for this. Among these are the NFPA Task Force on Juvenile Firesetting, and NFPA Juvenile Practitioners' Forum. Both of these recognize the need to have consistent national data collection, but no specific publications or software can be found as a result of this endeavor. Don Porth of the Portland Fire

Bureau (Porth, 1992), offered considerable insight on developing an effective program. In fact, as an individual who is not selling his product, he offers this information based on knowledge and experience. As one of the organizations surveyed for this research paper, the answers to the three questions in the survey, is contained in a two part annual report. This report is impressive to say the least. This JFP most closely resembles the national model found in NFJ/ACP series (FA-146, 1994, FA-147, 1994, FA-145, 1994, and FA-149, 1994). The limitations of this JFP for many jurisdictions might be the time and staff needed to dedicate to this type of extensive data collection, analysis, and reporting. The Fireproof Children Handbook (Bills, et al., 1990), and Playing with Fire: A Deadly Game, A Companion Manual (Pinsonneault, 1991) are excellent resources for setting up a JFP and working with juvenile firesetters. But like the FEMA/USFA companion handbook series (FEMA/USFA, FA 83, 1988, FEMA/USFA, FA 82, 1988, FEMA/USFA, FA 80, 1988), these manuals and handbooks do not give specific instruction or modeling for follow-up or data collection for evaluation purposes. These FEMA/USFA handbooks would not be considered recent publications, but are still available today, and have not been revised. Many organizations and fire departments rely on these handbooks as the foundation of the programs in their communities. This author's JFP is an example of a program that used the handbooks as a foundation.

The Massachusetts State-Wide Juvenile Firesetter Program Coalition and the State of Illinois Youthful Firesetter Program are included in the survey of JFP's, and show a state-wide effort for consistent data collection. Through the analysis of the surveys returned, it becomes apparent that many programs base follow-up and data collection according to individual needs and budgetary constraints.

The challenge to a jurisdiction or organization is to strive to develop a program within the constraints of a limited budget and resources and at the same time strive to emulate national modeling.

One can understand quickly the implications of an adequate JFP that covers the spectrum of necessary

parts of an entire program. Thus, the results of programs that begin small, are homegrown, and grow as the program necessitates (Cook, et al., 1989).

Recommendations

To justify the worth and effectiveness of a JFP within budgetary constraints, the following recommendations are suggested:

The existing data collection system or MIS should be compared to the national model found in the NFJ/ACP series (FA-146, 1994, FA-147, 1994, FA-145, 1994, FA-149, 1994), and revised to include the necessary elements that are not currently included. This would involve improving the current computer database and forms. To implement these changes it is important to make it as user friendly as possible to ensure that information retrieval is accomplished. This retrieval also needs to be efficient to make the most of staff time.

Follow-up frequency with juvenile firesetters and their families should be increased to parallel the national model found in the NFJ/ACP series (FA-146, 1994, FA-147, 1994, FA-145, 1994, FA-149, 1994). To accomplish this, the MIS should be formatted to provide on-going information relevant to the juvenile firesetter. A method should be provided to easily receive or acquire reminders or ticklers to follow-up on the numerous different cases that are current. And as a result of this follow-up plan, a procedure should be drafted to deal with juveniles when follow-up indicates reoccurrence of fireplay or firesetting.

To compare the results of the JFP first to local state statistics and recidivism rates, the need arises for improved reporting and evaluation from the other local fire departments, county-based task force organizations, and on a state level. The challenge in this recommendation is the ability of a small

volunteer fire department to provide a JFP with budget constraints, staff and time limitations, as well as recognizing the need. Unless the need is recognized, the probability of a county level task force is not as attainable. The recommendation is to encourage and support the State Fire Marshal to implement the education, training, and structure to implement a statewide coalition.

To compare local JFP results nationally requires locating the individuals throughout the U.S. who have statistics and results for JFP's on a statewide scale. Networking is a valuable tool to accomplish this. Using the World Wide Web can serve as an invaluable tool. This has been shown by the survey results conducted for this research project, by which most of the JFP's were found using the World Wide Web. Contacting resources found in handbooks and manuals is also a good resource, but one must recognize that the contact person, address, and phone number may not be up-to-date. These resources may also be limited in number.

A recommendation on a national level is for the FEMA/USFA to develop a generic computer program that is flexible and can be tailored to a JFP as needed. This would provide the initiative to encourage data collection and evaluation based on a national model.

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Appendix A

Example of JFP Survey Letter

August 4, 1997

Portland Fire Bureau Juvenile Firesetter Program Manager 55 Southwest Ash Street Portland, OR 97204

Dear Program Manager:

I am presently enrolled in the Executive Fire Officer Program at the National Fire Academy. As a part of this program, I am required to write an applied research paper. I have chosen to conduct my research on juvenile firesetter programs across the United States.

I read about your program on the Internet in an article entitled, *Examples of U.S. Programs & Screening Techniques for Juvenile Firesetters*. Your program appeared to be well organized and professional. I would greatly appreciate it if you could share with me the answers to the following questions for my research:

- 1) After a juvenile completes your intervention program, do you follow-up to see if there is any reoccurrence of fireplay/firesetting?
- 2) If the answer to #1 is yes, how long after the completion of the program do you wait before following up? How many follow-ups do you do and for how long of a period of time (i.e., months, years) do you continue the follow-up?
- 3) Do you compile annual statistics? If the answer is yes, would you please list the information you include in the report. Do you model the statistical information after any other annual report such as a county task force or state?

Thank you in advance for any assistance you can provide me with. My Email address is marilyn@ci.maple-grove.mn.us. My mailing address is listed above – telephone (612) 494-6091 – and fax (612) 494-6439.

Sincerely,

Marilyn Arnlund Deputy Fire Marshal Appendix B

Children's Hospital Medical Center of Akron

One Perkins Square, Akron, OH 44308

Mary Mondozzi, BSN, MSN, CS, (330) 379-8813

- 1. Yes
- 2. Follow-up questionnaire at six months and then repeated at one year.
- 3. Yes. Not modeled after any county or state report. The following is included in MIS:
- 1. Child's age
- 2. Child's sex
- 3. Method of fireplay (Matches, Lighter, etc.)
- 4. If child has a hyperactivity disorder
- 5. If child is on any medications
- 6. If there is any other agency involved with the child

Fire Stoppers of Pierce County

City of Tacoma Fire Department

901 Fawcett Avenue, Tacoma, WA 98402-5699

Joe Meinecke, Program Manager, Fire Stoppers

- 1. Yes
- 2. Follow-up letter at three months
- 3. Yes. Statistics are used statewide. The following information is included:
- 1. Gender
- 2. Age
- Ethnic background (African American, Caucasian, Native American, Asian, Hispanic,
 Bi-multiracial)
- 4. Child resides with (Biological, Step, Adoptive, Foster, Grandparent, Other)
- 5. Level of concern
- 6. Household income
- 7. Case number (Year, Month, FDID#, Contact #)
- 8. Agency, phone number, interventionist, date
- 9. Repeat client (Yes or No)
- 10. Minor's zip code
- 11. Currently in mental heath treatment? (Yes or No)
- 12. Are there smokers in the household? (Yes or No)

- 13. How many working smoke detectors?
- 14. Referral source (Caregiver, School, Law enforcement, Mental health, Fire service, School police, Juvenile justice, Other)
- 15. Incident type (False reporting, Fireplay/no incident, Fireplay/incident, Intentional ignition, Fireworks, Making and/or using explosives, Unknown-if other describe)
- Incident location (Vehicle, Church, School, Other type residence, Single family home,Commercial building, Apartment, Wildland-grass-brush, Vacant lot, Other)
- 17. Ignition source (Matches, Lighters, Explosive device, Fireworks, Stove-oven, Wood stove, Fireplace, Other)
- 18. Who was involved in incident? (Acted with siblings-peers-friends, Acted alone)
- Ignition source obtained from (Home, Store, Restaurant, Motel-hotel, School, Other person,
 Found)
- 20. Date of incident (Month, Day, Year)
- 21. Burn injuries
- 22. Fatalities
- 23. Property loss and estimate
- 24. Number of people displaced by the fire
- 25. Multiple incidents (Yes or No, How many)
- 26. Legal charges filed (Yes or No)

City of Chula Vista Fire Department

447 F Street, Chula Vista, California 91910

James S. Geering, 619-691-5055

- 1. No
- 2. N/A
- Juvenile firesetters are referred to South Bay Community Services, a counseling division under the direction of the police department.

Operation Extinguish

Montgomery County, Maryland

101 Monroe Street, 12th Floor, Rockville, MD 20850-2589

Mary K. Marchone, Program Specialist, 301-217-2448

- 1. No, but monitor fire calls and reports for cases that involve youth.
- 2. N/A
- 3. Yes. The statistics are not modeled after any other county or state report. The following information is included:
- 1. Cases referred to program (Voluntary/Mandatory)
- 2. Completed intakes
- Cases referred by (Department of Juvenile Services, Youth Division, Department of Fire and Rescue Services, Other sources)
- New participants in Psychotherapeutic Resources, Inc. (PRI) therapy (Individual, Family, Individual and Family, Group)
- Participants referred to other agency therapy (Individual, Family, Individual and family, Group, Individual, Family and group)
- 6. Number of participants still in fire education or therapy (All cases currently open)
- 7. Number of participants sent back to referring agency.

Bingham Child Guidance Center's Program for Juvenile Firesetters

200 E. Chestnut Street, Louisville, Kentucky 40202-1822

Amy Willard, Research Assistant, 502-582-7549

- 1. No
- 2. N/A
- 3. Yes. The following information is included:
- 1. Total number of firesetters referred to program.
- Referring agency (Arson Squad Investigation, Court, Self, Child Protective
 Services, Arson Squad and Court, Doctor, Crimes against Children Unit, Seven Counties,
 Mother, Hospital, School, Children and Youth, Fire Department)
- 3. Ages of firesetters
- 4. Most frequently seen age

Mother/stepfather)

- 5. Number and percentage of males and female attending program
- 6. Zip Code
- 7. Percentage and number of life threatening fires
- 8. Percentage and number of major property destruction
- 9. Percentage and number of minor property destruction
- 10. Percentage and number of single-parent families
- 11. Guardianship (Number and percentage with mother, Mother and father, Father,

- 12. Percentage and number of families with family psychiatric history
- 13. Percentage and number of homes with a smoker in the home
- 14. Percentage and number of firesetters hospitalized
- 15. Percentage and number of firesetters in outpatient therapy

Phoenix Fire Department, Urban Services

Youth Firesetter Prevention Program

455 N. 5th Street, Phoenix, AZ 85004

Sylvia Echeveste, Caseworker, 602-262-7757

- 1. Yes
- 2. Follow-up with an evaluation card six months after the youth attended the program.
- 3. Yes. The following information is included:
- 1. Number of referrals
- 2. Where the referrals came from
- 3. Dollar loss due to juvenile set fires.
- 4. Number of attendees to the Youth Firesetter Prevention class
- 5. Number of parents and siblings who attended the class
- 6. Youth referred for counseling
- 7. Most common age
- 8. Most frequent ignition source
- 9. Most common place for fire setting
- 10. Number of families with a working smoke detector

Gainesville Fire Rescue Department

P.O. Box 490, mail Station #65, Gainesville, Florida 32602

Beth Hardee, 352-334-5065 X5467

- 1. Yes
- Follow-up is conducted with a call or visit at one month after last session. If
 individual is referred for counseling or therapy, follow-up is done at three-month intervals for at
 least two years on the average.
- 3. Yes. The statistics are not modeled after any other county or state report. The following information is included:
- 1. Total number of juvenile firesetters by age group
- 2. Total number of juvenile firesetters by race
- 3. Total number of juvenile firesetters for each incident type
- 4. Total number of juveniles in relation to quadrant of the city
- 5. Total number of juveniles with previous history of fireplay/firesetting

Anoka County Juvenile Task Force

1710 Highway 10, Spring Lake Park, MN 55432

Harlan Lundstrom, Coordinator, 612-786-4436

- 1. No
- 2. N/A
- 3. Yes. Report is county based. The following information is included:
- 1. Number of students in program
- 2. Fire Department making referral and number referred
- 3. Number of referrals from County Corrections for each city
- 4. Number of times the student is scheduled for program
- 5. Number of males and females attending program

Blaine, Spring Lake Park, Mounds View Fire Departments (S.B.M.)

1710 Highway 10, Spring Lake Park, MN 55432

Harlan Lundstrom, Bureau Chief, 612-786-4436

- 1. No
- 2. N/A
- 3. Yes. The following information is included:
- 1. Number of incidents reported
- 2. Number of incidents involving more than one juvenile
- 3. Number of fires by location (Inside, Outside, Away from juveniles home)
- 4. Number of juveniles reported
- 5. Number of juveniles' interviewed/assessed
- 6. Number of juveniles given education
- 7. Hours educated
- 8. Number of juveniles charged
- 9. Age range of juveniles
- 10. Sex, number of males, females
- 11. Type of fire
- 12. Address of incident
- 13. Ignitions source and total number of each
- 14. Where ignition materials were accessed from

- 15. Response cost
- 16. Total dollar loss
- 17. Agency referral source and number of referrals from each
- 18. Number of juveniles referred and to which agencies
- 19. Number of hours assessed
- 20. Number of hours educated
- 21. Knowledge test score
- 22. Assessment determination
- 23. Family status and number of juveniles from each type
- 24. Number of smokers in home
- 25. Number of juveniles with ADD-ADHD
- 26. Previous fire safety education (Yes or No)
- 27. Percentage of working and not working smoke detector in home
- 28. Recidivist (Yes or No)
- 29. History of fire play (Yes or No)

The Burn Institute

3702 Ruffin Road, Suite 101, San Diego, CA 92123-1842

Nancy Nowak, 619-541-2277

- 1. Yes
- 2. Follow-up is conducted by telephone at one month and by a mailed program evaluation at five months.
- 3. The following information is included:
- 1. Name
- 2. Address
- 3. Parents first and last names
- 4. Marital status
- 5. School name
- 6. School district
- 7. Grade
- 8. Age
- 9. Ignition Source
- 10. Special circumstances such as ADHD, ADD, history of physical or sexual abuse, etc.
- 11. Date of session
- 12. Dates of one and five month follow-up
- 13. Race

- 14. Zip code
- 15. Referral source
- 16. First offense or repeat offender
- 17. Referrals made to another agency
- 18. Comments/summarization

Virginia Beach Fire Department

Municipal Center, Building #21, Virginia Beach, VA 23456

Cappy Meridith, 757-563-1078

- 1. No
- 2. Time allowing, a follow-up by phone is conducted approximately six months after the final session.
- 3. Annual statistics are compiled and are not modeled after any other reports. The following information is included:
- 1. Number of initial incidents
- 2. Number of follow-up sessions
- 3. Referral source
- 4. Number of hours involved in each case
- 5. Number of females and males
- 6. Age of child
- 7. Incident number
- 8. Incident date and time
- 9. Name of child
- 10. Sex (Male or Female)
- 11. Grade in school
- 12. School name

- 13. Name of parent/guardian
- 14. Address
- 15. Home and work phone number
- 16. Type of incident (Fire, False alarm, Report of fire play)
- 17. First known incident? (Yes or No)
- Location of fire (Own home, Occupied dwelling, School, Mercantile, Vacant building,
 Shed, Outside, Dumpster-garbage, Other)
- 19. Room of origin (Child's bedroom, Other bedroom, Living room-family room, Garage,Bathroom, Kitchen, Other)
- 20. Ignition source (Match, Lighter, Other)
- 21. Type of accelerate used, if any (Gasoline, Fireworks, Aerosol container, Explosive device-type, Other-type)
- 22. Were other children involved in incident? (Yes or No)
- 23. Was investigator notified? (Yes or No and Who)
- 24. Report completed by (Name, Station and Shift)

St. Luke's Regional Medical Center Juvenile Firesetter Program

2720 Stone Park Blvd., Sioux City, IA 51104

Deb Motz, RN, 712-279-3898

- 1. Yes
- 2. Follow-up is conducted with a phone call or letter at four weeks after the last education session and at one year after the initial session.
- 3. Yes. The following information is included in our annual report:
- 1. Number of children referred to the program
- 2. Source of referrals
- 3. Number screened
- 4. Number given educational intervention
- 5. Number referred to mental health professionals
- 6. Number counseled by mental health professionals
- 7. Number of recidivists

Portland Fire Bureau Juvenile Firesetter Program

55 S.W. Ash Street, Portland, OR 97204-3590

Dave Centers, Program Manager, 503-823-3700

- 1. Yes
- 2. Follow-up is conducted by telephone or mail at four months after the initial interview
- 3. Yes. The following information is included in our annual report:
- 1. Total number of referrals
- 2. Percentage of juvenile related fires in the overall fire problem
- 3. Number of Fire Bureau Responses/reports
- 4. Dollar loss relating to the number juvenile arson incidents
- 5. Dollar loss comparing the number of juvenile arson vs. other arson
- 6. Dollar loss in relation to the number of juvenile fireworks incidents
- Dollar loss in relation to the number of juvenile involvement with fire that does not fall into other classifications
- 8. Dollar loss in relation to the number of school fires
- 9. Total dollar loss compared to the total number of incidents
- 10. Number of boys and girls in relation to level of concern (LOC)
- 11. Age at the time of referral
- 12. Birth order in relation to LOC
- 13. Percentage of recidivism in relation to LOC

- 14. Race
- 15. Adult caregiver / parental status in relation to LOC
- 16. Martial status of natural (biological) parents in relation to LOC
- 17. Smoking status of caregivers in the home in relation to LOC
- 18. Employment status of caregivers in relation to LOC
- 19. Household annual income levels in relation to LOC
- 20. Total number of adults and children in the firesetters home in relation to LOC
- 21. Affiliation with social service agencies prior to referral in relation to LOC
- 22. Match/lighter accessibility prior to the incident in relation to LOC
- 23. Census tracts (location of juvenile firesetter) in relation to LOC
- 24. Type of residence in relation to LOC
- 25. Ownership status of residence in relation to LOC
- 26. Referral source
- 27. Day of the week of incident occurred in relation to LOC
- 28. Time of the day of incident occurred in relation to LOC
- 29. Location of the incident in relation to LOC
- 30. Ignition source in relation to LOC
- 31. First item ignited in relation to LOC
- 32. How ignition item was obtained in relation to LOC
- 33. Number of injuries
- 34. Total known incidents by parents at time of most recent incident in relation to LOC
- 35. Number of juvenile caused fire deaths compared to all other fire deaths
- 36. Caregiver at the time of the most recent incident in relation to LOC

- 37. Whether child acted alone or was accompanied by another child in relation to LOC
- 38. How did the family hear about the program in relation to LOC
- 39. Had the child received formal fire safety education prior to the most recent incident in relation to LOC
- 40. Specialist performing the intervention in relation to LOC
- 41. Was the child/family referred to other programs/intervention or already in program in relation to LOC
- 42. Number of children seen by program in relation to LOC
- 43. Number of children unseen by program (refused/declined, no show, unable to contact)
- 44. Recidivism in relation to LOC
- 45. Number and type of follow-up (mail or phone)
- 46. Match/lighter availability before incident and at four months post-incident in relation to LOC
- 47. Program evaluation
- 48. Conclusions

St Paul Department of Fire and Safety Services

100 East 11th Street, St. Paul, MN 55101

Paula Peterson, 612-228-6241

- 1. Yes
- 2. Follow-up is conducted at one month, six months, and one year after the initial interview.
- 3. Yes. The following information is included our annual report:
- 1. Number completing program
- 2. Number motivated by curiosity
- 3. Number motivated by crisis
- 4. Success rate after at least one year after completing program
- 5. Deaths by child fire play of total fire deaths
- 6. Number of fires involving children playing with fire
- 7. Civilians injured from fires involving children playing with fire
- 8. Firefighters injured from fires involving children playing with fire
- 9. Total dollar loss
- 10. Comparison of the number crisis-motivated fire play to curiosity-motivated fire play

Survey B15 Tempe

Fire Department

P.O. Box 5002, Tempe, AZ 85280

Beverly Burns, 602-350-8857

- 1. Yes
- Follow-up is conducted by *phone or mail at three months, six to nine months and at one year.
 (*May not have a phone.)
- 3. No, but do a spreadsheet on the kids that are seen to help with any reoccurrence down the road.

City of Ville d' Ottawa

1445 Carling, Ottawa, Ontario, Canada K1Z 7L9

D.R. (Doug) Kightley, Co-ordinator, 613-798-8800

- 1. Yes
- 2. Follow up is conducted at one month, six months and at one year after completion of the program.
- 3. The following information is included:
- 1. First time offenders or repeat offender
- 2. Total number of children by month and year
- 3. Number of males and females
- 4. If psychiatric help was sought and received
- 5. Recidivism rate for month and year

City of Houston, Houston Arson Bureau

410 Bagby, 4th Floor, Houston, Texas, 77002

Lisa Hayes, 713-247-3776

- 1. Yes
- 2. Low risk follow-up is conducted at six months and higher risk follow up is conducted at three and six months after completion of the program.
- 3. The following information is included in our annual report:
- Number and percentage of child/juvenile* arson fires by location (Houses, Businesses, Vehicles, Schools, Apartments, Other)
- 2. Number of juvenile firesetting incidents in the schools by age (Child/adolescent)*
- 3. Property loss due to child/juvenile* firesetters
- Status of smoke detector (No detectors, Not working, Insufficient number, Unknown,
 Working) in child* arson fires with number of injuries and deaths
- Percentage of injuries from child* arson fires in homes with no smoke detectors or improperly working smoke detectors
- 6. Number of (Children, Juveniles, Civilian adults, Firefighters) injuries and deaths in child* arson fires
- 7. Number of reported child/adolescent* arson fires
- 8. Dollar loss of reported child/adolescent* arson fires
- 9. Percentage of change for all categories for a two year period

Child/juvenile* is Child is defined as youths under age 10 and Juvenile is defined as between ages 10-16.

Child/adolescent* is Child is defined as juvenile between ages 0-9 years old and Adolescent is defined as juvenile between ages 10-16 years old.

State of Illinois, Illinois Youthful Firesetter Program

1035 Stevenson Drive, Springfield, IL 62709

217-785-1030

- 1. No program, statistics only
- 2. N/A
- 3. The following information is included in annual report:
- 1. Fire department name, phone number, and fax number
- 2. NFIRS ID#
- 3. Fire Department Address, City, County, State, Zip code
- 4. Fire Department Contact Person and title
- 5. Number of firesetters identified
- 6. Firesetters by age range (0-7, 8-13, 14-18) and sex (Male or Female)
- 7. Number of injuries
- 8. Number of deaths
- 9. Dollar loss for all incidents involving juvenile firesetters
- 10. Number of incidents that fire department did not respond to
- 11. Ignition source (Matches, Cigarette lighters, Grill lighters, Other-describe)
- 12. Number of children referred to mental health
- 13. Comments

Cayuga County Juvenile Fireplay Intervention and Education Program

7413 County House Road, Auburn, N.Y. 13021

Ron Quill, 315-253-1199

- 1. Yes
- 2. Follow-up is conducted at one week after going through the program and will continue for four to six months. This is dependent on the individual and their circumstances, age and risk level. Cases are never closed.
- 3. No

Massachusetts State-Wide Juvenile Firesetter Program Coalition

State Road, P.O. Box 1025, Stow, MA 01775

Irene Pinsonneault, 508-636-9149

- 1. No program, statistics only
- 2. N/A
- 3. The following information is included:
- 1. Date of first contact
- 2. Program site
- 3. Age
- 4. Date of birth
- 5. Sex
- 6. Live with parents? (Yes or No), Live with foster parents? (Yes or No), Other residence (describe)
- 7. Attend school? (Yes or No), SPED? (Yes or No)
- 8. Grade
- 9. ADHD? (Yes or No)
- 10. Siblings (Age/sex)
- 11. Other agencies (DSS, DMH, DYS, Other)
- 12. Was there a fire? (Yes or No), Was the fire reported? (Yes or No), To whom was the fire reported?, When was the fire reported?

- 13. Was this the first/only known fire? (Yes or No)
- 14. Number of other known fires
- Description of firesetting history (None, Recent, Incidences several years which stopped,
 Persistent and on-going, Recent progression, Other)
- 16. Extent of damage (Minor, Moderate, Extreme)
- 17. Injuries (To whom?)
- 18. Number of subsidized units lost, Housing lost? (Yes or No)
- 19. Number of people displaced
- 20. Court case? (Yes or No), Charges (describe)
- 21. Interview outcome (Curiosity motivated, Delinquency related, Crisis, Pathological, Other)
- 22. Intervention services (Education, Community service, Counseling, Other)
- 23. Duration of services
- 24. Agencies involved
- 25. Recidivism risk (Minimal, Moderate, Extreme)
- 26. Date Completed

Lowell Fire Department, Fire Investigation Unit

50 Arcand Drive, Lowell, MA

Lt. Frank Hogen, 978-459-6110

- 1. Yes
- 2. A progress report is conducted on clients written goals at the end of six months from the date of graduation.
- 3. The following information is included:
- 1. Number of juvenile fires per year
- Complete a Massachusetts State-Wide Juvenile Firesetter Intervention Program Coalition
 Tracking/Data Collection Form

Oklahoma City Fire Department

Operation FireSAFE

820 N.W. 5th, Oklahoma City, OK 73106

Major Timothy R. Adams, Sr. Public Education Instructor, 405-297-3318

- 1. Yes
- 2. Follow-up calls are made at 3, 6, and 12 months from the interview date.
- 3. Yes, the following information is included:
- 1. Number of children completing program
- 2. Gender breakdown by total number and percentage
- 3. Race/Ethnic breakdown by total number and percentage
- 4. Age breakdown by total number and percentage
- 5. Referral sources (Investigation, Call-ins, Other)
- 6. Total number of injuries due to child fireplay
- 7. Total number of deaths due to child fireplay
- 8. Dollar losses per month due to child fireplay
- 9. Total dollar loss for year

City of Alexandria, Virginia

Code Enforcement

P.O. Box 178, Alexandria, Virginia, 22313

Richard A. Sisler, 703-838-4360

- 1. Yes
- 2. Follow-up is conducted at two weeks and six weeks after intervention.
- 3. The following information is included:
- 1. Age
- 2. Race
- 3. Sex
- 4. Time of incident
- 5. Type of supervision that child had at the time
- 6. Material ignited
- 7. Heat source

West Allis Fire Department

2040 South 67 Place, West Allis, WI 53219

Martin M. King, 414-302-8748

- 1. Yes
- 2. Follow-up is conducted at one month after completion of the program.
- 3. The following information is included:
- 1. Number of Participants-Ten Year Trend
- 2. Family Status
- 3. Family Income
- 4. Participants by Sex
- 5. Participants by Age (5 & Under, 6-11, 12-13, 14 to Adult)
- 6. Hours spent on JFS Program
- 7. Percentage of homes with Parents that Smoke
- 8. Participation by Family Status
- 9. Percentage of successful follow-up contacts

Boston Fire Department

FIRESENSE

Juvenile Firesetters Program

920 Massachusetts Avenue, Boston, MA 02118

Debbie Burke-Coordinator, 617-343-3325

- 1. Yes
- 2. Children's Hospital does the follow-up three months after appearance in court. If any are missed follow-up is then conducted one to two months later.
- 3. The following information is included:
- Complete a Massachusetts State-Wide Juvenile Firesetter Intervention Program Coalition
 Tracking/Data Collection Form

City of Palatine Fire Department

200 East Wood Street, Palatine, IL 60067

Lt. Bob Morris, 847-202-6666

- 1. Yes
- 2. Follow-up is conducted by calling two to four weeks after completion of the program.
- 3. The following information is included:
- 1. Marital status
- 2. Month of the year
- 3. Age
- 4. Sex

Appendix C

Table C1

Follow-up Frequency and Method

Follow up Frequency	Method of Follow-up	F ^a
6 months and 12 months	Questionnaire	1
3 months	Letter	1
1 month	Unknown	1
2-4 weeks	Phone call	1
6 months	Evaluation card	1
6 months	Progress report is conducted on clients	1
	written goals	
1 month. If individual is referred for counseling or	Phone call or visit	1
therapy, follow-up is done at 3-month intervals for at		
least two years on average.		
1 month and 5 months	Telephone at one month and mailed	1
	program evaluation at 5 months	
Time allowing, at 6 months	Phone call	1
1 month and 12 months	Phone call or letter	1
4 months	Phone call or mail	1
1 month, six months, and 12 months	Unknown	2

Note. Column F^a represents the number of times a statistic is found in all surveys.

3 months, 6-9 months, and 12 months	Phone call, if no phone then mail	72 1
3 months, six months, and 12 months	Unknown	1
6 months for low risk and 3 months and 6 months for	Unknown	1
higher risk		
3 months, if any are missed, then follow-up is made 1-2	Unknown	1
months later		
1 week and continue weekly for 4-6 months; this is	Unknown	1
dependent on the individual and their circumstances,		
age and risk level.		
2 weeks and 6 weeks, depending on the incident, may	Unknown	1
continue to follow-up more or less		

Appendix D

Table D1
Statistical Information From All Surveys

Statistical Information	F ^a
Address	2
Address of incident	1
ADHD? (Yes or No)	3
Adult caregiver/parental status in relation to LOC*	1
Affiliation with social services prior to referral in relation to LOC*	1
Age	5
Age at the time of referral	1
Age breakdown by total number & percentages	1
Age of child	1
Age range of juveniles	1
Agencies involved	3
Agency referral source and number of referrals from each	1
Ages of firesetters	1
Assessment determination	1
Attend school? (Yes or No), SPED? (Yes or No)	3

Note. Column F^a represents the number of times a statistic is found in all surveys.

LOC* = Level of Concern.

Birth order in relation to LOC*	1
Caregiver at the time of the most recent incident in relation to LOC*	1
Cases referred by (Department of Juvenile Services, Youth Division, Department of Fire &	1
Rescue, Other sources)	
Cases referred to program (Voluntary / Mandatory)	1
Census tracts (Location of Juvenile firesetter) in relation to LOC*	1
Court case? (Yes or No), Charges (Describe)	3
Civilians injured from fires involving children playing with fire	1
Comments	1
Comments/summarization	1
Comparison of the number of crisis-motivated fire play to curiosity-motivated fire play	1
Completed intakes	1
Conclusions	1
Date completed	3
Date of birth	3
Date of first contact	3
Date of session	1
Dates of one and five month follow-up	1
Day of the week the incident occurred in relation to LOC*	1
Deaths by child fire play of total fire deaths	1
Description of firesetting history (None, Recent, Incidences several years which stopped,	3
Persistent and on-going, Recent progression, Other)	
Dollar loss comparing the number of juvenile arson vs. other arson	1

Dollar loss due to juvenile set fires	1
Dollar loss for all incidents involving juvenile firesetters	1
Dollar loss in relation to the number of juvenile fireworks incidents	1
Dollar loss in relation to the number of juvenile involvement with fire that does not fall into other	1
classifications	
Dollar loss in relation to the number of school fires	1
Dollar loss of reported child/adolescent* arson fires (*Child is defined as juvenile between	1
ages 0-9 years old and Adolescent is defined between ages 10-16 years old.)	
Dollar loss per month due to child fireplay	1
Dollar loss relating to the number of juvenile arson incidents	1
Duration of services	3
Employment status of caregivers in the home in relation to LOC*	1
Extent of damage (Minor, Moderate, Extreme)	3
Family Income	1
Family Status	1
Family status and number of juveniles for each type	1
Fire Department making referral and number referred	1
Fire department name, Phone number, and Fax number, Fire department address, City	1
County, State, Zip code, Fire department contact person and Title	
Firefighters injured from fires involving children playing with fire	1
Firesetters by age range (0-7, 8-13, 14-18) and sex (Male or Female)	1
First item ignited in relation to LOC*	1
First known incident? (Yes or No)	1

First offense or repeat offender	1
First time offender or repeat offender	1
Gender breakdown by total number and percentage	1
Grade	4
Grade in school	1
Guardianship (Number and percentage with mother, Mother and father, Father,	1
Mother/stepfather)	
Had the child received formal fire safety education prior to the most recent incident in relation	1
to LOC*?	
Heat source	1
History of fireplay (Yes or No)	1
Hours spent on JFS Program	1
Household annual income levels in relation to LOC*	1
How did the family hear about the program in relation to LOC*?	1
How ignition source was obtained in relation to LOC*	1
If psychiatric help was sought and received	1
Ignition source (Match, Lighter, Other)	1
Ignition source (Matches, Cigarette lighters, Grill lighters, Other-describe)	1
Ignition source and total number of each	1
Ignition source in relation to LOC*	1
Ignition source	1
Incident date and time	
Incident number	1

Injuries (To whom?)	3
Intervention services (Education, Community service, Counseling, Other)	3
Interview outcome (Curiosity motivated, Delinquency related, Crisis, Pathological, Other)	3
Knowledge test score	1
Live with parents? (Yes or No), Live with foster parents? (Yes or No), Other residence	3
(Describe)	
Location of fire (Own home, Occupied dwelling, School, Mercantile, Vacant building, Shed,	1
Outside, Dumpster-garbage, Other)	
Location of incident in relation to LOC*	1
Marital status of natural (Biological) parents in relation to LOC*	1
Marital status	2
Match-lighter accessibility prior to incident in relation to LOC*	1
Match-lighter availability before incident and at four months post-incident in relation to LOC*	1
Material ignited	1
Month of the Year	1
Most common age	1
Most common place for firesetting	1
Most frequent ignition source	1
Most frequently seen age	1
Name	1
Name of child	1
Name of parent/guardian, home and work number	1
New participants in Psychotherapeutic Resources, Inc. therapy (Individual, Family, Individual	1

NFIRS ID#	1
Number and percentage of child/juvenile arson fires by location(Houses, Businesses, Vehicles,	1
Schools, Apartments, Other) (*Child is defined as youths under age 10 and Juvenile is defined	
as between ages 10-16)	
Number and percentage of males and females attending program	1
Number and type of follow-up (Mail or phone)	1
Number completing program	1
Number counseled by mental health professional	1
Number given educational intervention]
Number motivated by curiosity and crisis	1
Number of (Children, Juveniles, Civilian Adults, Firefighters) injuries and deaths in child* arson]
fires (*Child is defined as youths under age 10)	
Number of attendees to the Youth Firesetter Prevention class]
Number of boys and girls in relation to the LOC*]
Number of children completing program]
Number of children referred to mental health]
Number of children referred to the program]
Number of children seen by program in relation to LOC*]
Number of children unseen by program (Refused/declined, No show, Unable to contact)	1
Number of deaths	1
Number of families with a working smoke detector]
Number of Fire Bureau Responses/reports	1

Number of fires by location (Inside, Outside, Away from juveniles home)	1
Number of fires involving children playing with fire	1
Number of firesetters identified	1
Number of follow-up sessions	1
Number of hours assessed	1
Number of hours educated	1
Number of hours involved in each case	1
Number of incidents involving more than one juvenile	1
Number of incidents reported	1
Number of incidents that fire department did not respond to	1
Number of injuries	2
Number of juvenile caused fire deaths compared to all other fire deaths	1
Number of juvenile fires per year	1
Number of juvenile firesetting incidents in the schools by age (*Child/Adolescent) (Child is	1
defined as juveniles between ages 0-9 years old and Adolescent is defined as juvenile between	
ages 10-16 years old)	
Number of juveniles charged	1
Number of juveniles given education	1
Number of juveniles referred and to which agencies	1
Number of juveniles reported	1
Number of juveniles with ADD/ADHD	1
Number of juveniles' interviewed-assessed	1

Number of male and females	1
Number of females and males	1
Number of males and females attending the program	1
Number of other known fires	3
Number of parents and siblings who attended class	1
Number of participants sent back to referring agency	1
Number of participants still in fire education or therapy (All cases currently open)	1
Number of participants- Ten Year Trend	1
Number of people displaced	3
Number of recidivists	1
Number of referrals	1
Number of referrals from County Corrections for each city	1
Number of reported child/adolescent* arson fires	1
Number of smokers in home	1
Number of students in program	1
Number of subsidized units lost, Housing lost? (Yes or No)	3
Number of times the student is scheduled for program	1
Number of initial incidents	1
Number screened	1
Other agencies (DSS, DMH, DYS, Other)	3
Ownership status of residence in relation to LOC*	1
Parents first and last names	1
Participants by Age (5 & Under, 6-11, 12-13, 14 to Adult)	1

Participants by Sex	1
Participation by Family Status	1
Participants referred to other agency (Individual, Family, Individual and family, Group,	1
Individual, Family and group)	
Percentage and number of families with psychiatric history	1
Percentage and number of firesetters hospitalized	1
Percentage and number of firesetters in outpatient therapy	1
Percentage and number of homes with a smoker in the home	1
Percentage and number of life threatening fires	1
Percentage and number of major property destruction	1
Percentage and number of minor property destruction	1
Percentage and number of single-parent families	1
Percentage of change for all categories for a two year period	1
Percentage of Homes with Parents that Smoke	1
Percentage of injuries from child* arson fires in homes with no smoke detectors or improperly	1
working smoke detectors (*Child is defined as youths under age 10)	
Percentage of juvenile related fires in overall fire problem	1
Percentage of recidivism in relation to LOC*	1
Percentage of successful follow-up contacts	1
Percentage of working and not working smoke detector in home	1
Previous fire safety education (Yes or No)	1
Program evaluation	1
Program site	3

Property loss due to child/juvenile* firesetters (*Child is defined as youths under age 10 and	1
Juvenile is defined as between ages 10-16)	
Race	3
Race-ethnic breakdown by total number and percentage	1
Recidivism in relation to LOC*	1
Recidivism rate for month and year	1
Recidivism risk (Minimal, Moderate, Extreme)	3
Recidivist (Yes or No)	1
Referral agency (Arson Squad Investigation, Court, Self, Child Protection Services, Arson	1
squad and court, Doctor, Crimes against children unit, Seven Counties, Mother, Hospital,	
School, Children and Youth, Fire Department)	
Referral source	3
Referral sources (Investigation, Call ins, Other)	1
Referrals made to another agency	1
Number referred to mental health professionals	1
Report completed by (Name, Station, Shift)	1
Response cost	1
Room of origin (Child's bedroom, Other bedroom, Living room-family room, Garage,	1
Bathroom, Kitchen, Other)	
School district	1
School name	2
Sex	5
Sex (Male or Female)	1

Sex, number of males, females	1
Siblings (Age/Sex)	3
Smoking status of caregivers in home in relation to LOC*	1
Source of referrals	1
Special circumstances such as ADHD, ADD, History of sexual or physical abuse	1
Specialist performing the intervention in relation to LOC*	1
Status of smoke detector (No detectors, Not working, Insufficient number, Unknown,	1
Working) in child* arson fires with number of injuries and deaths. (*Child is defined as youths	
under age 10)	
Success rate after at least one year after completing program	1
Time of incident	1
Time of the day the incident occurred in relation to LOC*	1
Total dollar loss	2
Total dollar loss compared to the total number of incidents	1
Total dollar loss for year	1
Total known incidents by parents at time of most recent incident in relation to LOC*	1
Total number of adults and children in the firesetters home in relation to LOC*	1
Total number of children by month and year	1
Total number of deaths due to child fire play	1
Total number of firesetters referred to program	1
Total number of injuries due to child fire play	1
Total number of juvenile firesetters by age group	1
Total number of juvenile firesetters by race	1

Total number of juvenile firesetters for each incident type	1
Total number of juveniles in relation to quadrant of the city	1
Total number of juveniles with previous history of fireplay/firesetting	1
Total number of referrals	1
Type of accelerate used, if any (Gasoline, Fireworks, Aerosol containers, Explosive device-	1
Type, Other-type)	
Type of fire	1
Type of incident (Fire, False alarm, Report of fireplay)	1
Type of residence in relation to LOC*	1
Type of supervision child had at the time	1
Was investigator notified? (Yes or No and Who)	1
Was the child/family referred to other programs/intervention or already in program in relation	1
to LOC*	
Was there a fire? (Yes or No), Was the fire reported? (Yes or No), To whom was the fire	3
reported?, When was the fire reported?	
Was this the first/only known fire? (Yes or No)	3
Were other children involved in incident? (Yes or No)	1
Where ignition materials were accessed from	1
Where referrals came from	1
Whether the child acted alone or was accompanied by another child in relation to LOC*	1
Youth referred for counseling	1
Zip code	2

Table E1

Information Relating to Juvenile

Statistics Relating to Juvenile	F^{a}	F^{b}
Name	1	2
Name of child	1	-
Address	2	2
Zip code	2	2
Age	5	10
Age at the time of referral	1	-
Age of child	1	-
Date of birth	3	-
Sex	5	6
Sex (Male or Female)	1	-
Siblings (Age/Sex)	3	4
Birth order in relation to LOC*	1	-
Attend school? (Yes or No), SPED? (Yes or No)	3	3
Race	3	3

School name 2 2

		89
School district	1	1
Grade	4	5
Grade in school	1	-
ADHD? (Yes or No)	3	4
Special circumstances such as ADHD, ADD, History of sexual or physical abuse?	1	-
Previous fire safety education (Yes or No)	1	2
Had the child received formal fire safety education prior to the most recent incident in	1	-
relation to LOC*?		
Court case? (Yes or no), Charges (Describe)	1	1
History of fireplay (Yes or No)	1	14
Description of firesetting history (None, Recent, Incidences several years which	3	-
stopped, Persistent and on-going, Recent progression, Other)		
First offense or repeat offender	1	-
First time offender or repeat offender	1	-
First known incident? (Yes or No)	1	-
Was this the first/only known fire? (Yes or No)	3	-
Number of other known fires	3	-
Recidivist (Yes or No)	1	-
Recidivism risk (Minimal, Moderate, Extreme)	3	3
Were other children involved in incident? (Yes or No)	1	2
Whether the child acted alone or was accompanied by another child in relation to	1	-
LOC*		

Statistics Relating to Parent or Guardian and Residence or Environment	F^a	F^b
Parents first and last name	1	2
Name of parent/guardian, home and work number	1	-
Employment status of caregivers in the home in relation to LOC*	1	1
Marital status	2	8
Marital status of natural (Biological parents) in relation to LOC*	1	-
Adult caregiver/parental status in relation to LOC*	1	-
Family Status	1	
Family status and number of juveniles for each type	1	-
Percentage and number of single-parent families	1	-
Guardianship (Number and percentage with mother, Mother and father, Father,	1	-
Mother/stepfather)		
Caregiver at the time of the most recent incident in relation to LOC*	1	1
Live with parents? (Yes or No), Live with foster parents? (Yes or No), Other	3	3
residence (Describe)		
Household income	1	3

relation to LOC*

Statistics Relating to Fire Incident	F^a	\mathbf{F}^{b}
Address of incident	1	1
Day of the week the incident occurred in relation to LOC*	1	1
Month of the Year	1	-
Extent of damage (Minor, Moderate, Extreme)	3	3
First item ignited in relation to LOC*	1	2
Material ignited	1	-
How ignition item was obtained in relation to LOC*	1	1
Ignition source	1	7
Ignition source (Match, Lighter, Other)	1	-
Ignition source (Matches, Cigarette lighters, Grill lighters, Other-describe)	1	-
Ignition source and total number of each	1	-
Ignition source in relation to LOC*	1	-
Heat source	1	-
Most frequent ignition source	1	-
Incident date and time	1	7

			9
Time of the day the incident occurred in relation to LOC*	1	-	フ
Time of incident	1	-	
Was there a fire? (Yes or No), Was the fire reported (Yes or No), To whom was the	3	-	
fire reported?, When was the fire reported?			
Incident number	1	1	
Most common place for firesetting	1	7	
Location of fire (Own home, Occupied dwelling, School, Mercantile, Vacant building,	1	-	
Shed, Outside, Dumpster-garbage, Other)			
Location of incident in relation to LOC*	1	-	
Number of fires by location (Inside, Outside, Away from juveniles home)	1	-	
Number and percentage of child/juvenile* arson fires by location (Houses, Businesses,	1	-	
Vehicles, Schools, Apartments, Other) (*Child is defined as youths under age 10 and			
Juvenile is defined as between ages 10-16)			
Number of juvenile firesetting incidents in the school by age(*Child/adolescent)	1	-	
(*Child is defined as juveniles between ages 0-9 years old and Adolescent is defined			
as juvenile between ages 10-16 years old)			
Room of origin (Child's bedroom, Other bedroom, Living room-family room, Garage,	1	-	
Bathroom, Kitchen, Other)			
Number of people displaced	3	3	
Number of subsidized units lost, Housing lost? (Yes or No)	3	3	
Response cost	1	1	
Type of accelerate used, if any (Gasoline, Fireworks, Aerosol containers, Explosive	1	1	
device-type, Other-type)			

Statistics Relating to Program, Services, and Education F ^a		F ^b
Date of session	1	1
Dates of one and five month follow-up	1	1
Number and type of follow-up (Mail or phone)	1	1
Date of first contact	3	3
Date completed	3	3
Duration of services	3	3
Number of follow-up sessions	1	1
Number of participants still in fire education or therapy (All cases currently open)	1	1
Intervention services (Education, Community service, Counseling, Other)	3	3
Assessment determination	1	4
Interview outcome (curiosity motivated, delinquency related, crisis, pathological, other) 3	-
Number motivated by curiosity and crisis	1	1
Comparison of the number of crisis-motivated fire play to curiosity-motivated fire play	1	1
Knowledge test score	1	1
Most common age	1	8

1

1

Number of juveniles given education

Number given educational intervention

		98
Completed intakes	1	-
Race-ethnic breakdown by total number and percentage	1	2
Total number of juvenile firesetters by race	1	-
Number of times the student is scheduled for program	1	1
Number of parents and siblings who attended class	1	1
Participation by Family Status	1	1
Number of children unseen by program (Refused/declined, No show, Unable to	1	1
contact) Number of Participants- Ten Year Trend	1	1
Number of hours involved in each case	1	4
Number of hours assessed	1	-
Number of hours educated	1	-
Hours spent on JFS Program	1	-
Number of juveniles interviewed-assessed	1	2
Number screened	1	-
Program site	3	3
Success rate after at least one year after completing program	1	1
Percentage of successful follow-up contacts	1	1
Final status of child	1	1
Program evaluation	1	4
Conclusions	1	-
Comments	1	-
Comments/summarization	1	-

Table E5

Statistics Relating to Referral or Other Agencies	F^a	F ^b
Number of referrals	1	35
Number of children referred to the program	1	-
Total number of firesetters referred to program	1	-
Total number of referrals	1	-
Number counseled by mental health professional	1	-
Number of referrals from County Corrections for each city	1	-
Number of children referred to mental health	1	-
Number of juveniles referred and to which agencies	1	-
Number of participants sent back to referring agency	1	-
Percentage and number of firesetters in outpatient therapy	1	-
Fire Department making referral and number referred	1	-
Agency referral source and number of referrals from each	1	-
Agencies involved	3	-
Referral source	3	-

		100
Source of referrals	1	-
Where referrals came from	1	-
Referral sources (Investigation, Call ins, Other)	1	-
Referrals made to another agency	1	-
Youth referred for counseling	1	-
Referred to mental health professional	1	-
If psychiatric help was sought and received	1	-
Affiliation with social services prior to referral in relation to LOC*	1	-
Cases referred by (Department of Juvenile Services, Youth Division, Department of	1	-
Fire & Rescue, Other sources)		
Referral agency (Arson Squad Investigation, Court, Self, Child Protection Services,	1	-
Arson Squad and Court, Doctor, Crimes Against Children Unit, Seven Counties,		
Mother, Hospital, School, Children and Youth, Fire Department)		
New participants in Psychotherapeutic Resources, Inc. therapy (Individual, Family,	1	-
Individual and family, Group)		
Participants referred to other agency (Individual, Family, Individual and family, Group,	1	-
Family and group)		
Was the child/family referred to other programs/intervention or already in program in	1	-
relation to LOC*		
Other agencies (DSS, DMH, DYS, Other)	3	-
Cases referred to program – voluntary-mandatory	1	-

Statistics Relating to Fire Department Information	$\mathbf{F}^{\mathbf{a}}$	F^{b}
Fire department name, Phone number and Fax number, Fire department address, City,	1	1
County, State, Zip code, Fire department contact person and Title		
NFIRS ID#	1	1
Number of Fire Bureau Responses/reports	1	1
Report completed by (Name, Station, Shift)	1	1
Was investigator notified? (Yes or No and Who)	1	1

Table E7

Statistics Relating to Injuries, Deaths, and Damages	F ^a	F^{b}
Number of injuries	4	12
Injuries to whom?	1	-
Civilians injured from fires involving children playing with fire	1	-
Firefighter injured from fires involving children playing with fire	1	-
Percentage and number of firesetters hospitalized	1	-
Percentage of injuries from child* arson fires in homes with no smoke detectors or	1	-
improperly working smoke detectors (*Child is defined as youths under age 10)		
Total number of injuries due to child fire play	1	-
Number of (Children, Juveniles, Civilian adults, Firefighters) injuries and deaths in	1	-
child* arson fires. (*Child is defined as youths under age 10)		
Status of smoke detector (no detector, not working, insufficient number, unknown,	1	-
working) in child* arson fires with number of injuries and deaths. (*Child is defined as		
youths under age 10)		
Percentage and number of life threatening fires	1	1
Number of deaths	1	7
Deaths by child fire play of total fire deaths	1	-

Table E8

Miscellaneous Information

Miscellaneous Statistics	F^a	F^{b}	
Census tracts (Location of juvenile firesetter) in relation to LOC*		1	1
Total number of juveniles in relation to quadrant of the city		1	1
Number of fires involving children playing with fire		1	6
Number of incidents reported		1	-
Number of juvenile fires per year		1	-
Number of reported child/adolescent* arson fires		1	-
Number of initial incidents		1	-
Percentage of juvenile related fires in overall fire problem		1	-
Number of firesetters identified		1	1
Total number of juvenile firesetters for each incident type		1	1

		105
Number of incidents involving more than one juvenile	1	1
Number of incidents that fire department did not respond to	1	1
Number of juveniles charged	1	1
Number of juveniles reported	1	1
Number of juveniles with ADD/ADHD	1	1
Percentage of change for all categories for a two year period	1	1
Specialist performing the intervention in relation to LOC*	1	1
Total number of juveniles with previous history of fireplay/firesetting	1	1

Table E9

Information Relating to Recidivism

Statistics Relating to Recidivism	F^a	F^{b}	
Number of recidivists		1	4
Percentage of recidivism in relation to LOC*		1	-
Recidivism in relation to LOC*		1	-
Recidivism rate for month and year		1	-